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THE INDUSTRIAL OUTLOOK FOR AGRICULTURE  
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We are at present greatly interested in the short-time outlook for agriculture. The war in Europe has become the outstanding feature in prospects for agricultural prices and income for 1940. There is considerable danger that our concern with the various potentialities in the war situation and the many possible impacts on both industry and agriculture may lead us to pay too little attention to the long-time feature in agricultural prospects. One of these features is the shortage of industrial opportunities for submarginal and surplus farm population, and it is that feature and some of its implications that I want to talk about.

Among students of the short-time industrial outlook, there are as usual diverging opinions. Here and there may be one who thinks we are headed for full employment as a result of the war. This view assumes a continuation of the war at least through 1940 and a very marked further rise in business activity in the United States based on the fact that we are the only major country that can supply the industrial products which cannot be supplied as in peacetime by the warring countries. At the other extreme is the view that the recent sharp advance in industrial production has resulted in a building up of inventories much as happened during the first part of 1937, and that war demand for both industrial and agricultural products is likely to be disappointing. This, with the lack of evidence that substantial private capital is being invested in job-creating ventures, leads them to expect a substantial reduction in industrial activity in the immediate future, a reduction possibly wiping out all of the sharp gains since August, and possibly more. Another group naturally takes an intermediate view, as represented by the Agricultural Outlook for 1940 just released by the Bureau of Agricultural Economics.

The Agricultural Outlook for 1940 as formulated by the BAE concludes (on the assumption that war will continue through 1940) that export demand for some farm products will be increased but for others, decreased; that there may be a temporary letdown in industrial activity during the first part of 1940 to a level more nearly in line with the actual volume of domestic consumer demand and exports; that recovery from such a possible recession should be sufficiently vigorous to bring the activity for the year at least moderately above that for 1939. The report contains considerable discussion of the uncertainties as to the duration of the war, its effect on shipping facilities, the availability of foreign purchasing power, supplies and needs of both industrial and agricultural products, and contrasts between the present situation and that of 1914.

But the significant fact, for the line of thought I want to develop here, is that this analysis is in terms of only a moderate improvement over the average conditions of 1939 and not in terms of full recovery and full employment. These apparently are not in prospect for 1940. In fact, we are impressed by the possibility that we may already have witnessed more of the short-time recovery we are likely to have. Even if industrial production should advance another 10 percent above the present level--which very few expect--agriculture will still face the fundamental difficulties it has been struggling with so far during the 1930's, such as reduced foreign outlets for our own export crops, inadequate purchasing power in the domestic markets, and surplus people on the land sharing an inadequate income from farm production.

The fact that much of our agricultural problem turned on the course of foreign trade as well as on the course of domestic business has been pointed out frequently. And since the short-time prospects for exports, commodity by commodity, are dealt with in the outlook report, it is not necessary to review them here, although it may be well to remember that the new factor in the export situation, namely war in Europe, solves nothing. If there should be short-time benefits from increased war demand for some commodities, there are as likely to be losses for others. The World War is not an adequate guide as to what export and price developments in 1940 or 1941 may be. Leaning too much on that past experience could easily be disappointing, for in many respects the present operations in foreign trade between the warring countries and the United States are materially different.

One more point should be made with respect to our export trade before dealing more specifically with the domestic business situation, and that is the implications in the shifting distribution of our exports by countries. It has not been observed generally that Europe has been declining in relative importance as a market for our total exports. During the 1870's Europe took about 85 percent of our total exports. In 1900 it took only 75 percent. In 1910 it took 65 percent and in 1914, 60 percent. The World War temporarily increased the share of our exports going to Europe, but after 1919 the downward trend in the relative importance as an export market for the United States was resumed, and by 1929 it fell to 45 percent or almost exactly in line with the prewar rate of decline. For the first 9 months of 1939 it was even lower, at 40 percent.

As Europe declined in relative importance to about half of what it was 50 years ago, other countries have naturally become relatively more important. The greatest relative increases have occurred in our trade with Asia, with South America, and with Canada and Central America. Our present increased interest in expanding our economic and cultural relations with South America is thus in line with this long-time decline in the relative importance of the European market, but it has a very important agricultural aspect--the shift has been in the direction of countries that do not need, and are not likely to need, our surplus wheat and cotton so much as they do our industrial

products. The war thus does not solve the problem of surplus-producing capacity in the wheat and cotton bolts.

We now turn to an examination of the present course of our industrial or business cycle. And we shall concentrate our attention on one key item--the item of industrial production. If we could know with certainty what the course and volume of industrial production will be, we would by means of certain statistical formulae know a number of other very important things. For example, the official index of industrial production has now risen to 120 percent of the 1923-25 average for October and is expected to average close to 125 for November and December compared with 76 percent at the bottom, in May 1938. According to the outlook report, part of this gain may be lost after the turn of the year. Some look for a small decline of perhaps 10 to 15 points; others, 20 to 30 points.

If we could know that industrial activity for 1940 would be only 10 points lower than at present, but still 10 points above the 1939 average, we would also know (1) that the national income would be about 5 billion dollars greater and that farm income would be 500 to 600 million dollars greater than in 1939, (2) that total nonfarm employment would amount to about 36 million persons compared with 32 million at the low point of 1938, and (3) that agricultural prices would be somewhat higher. We would, however, also know (4) that the increased farm income would not wipe out the present shortage in farm income below the parity level, and (5) that the rise in industrial employment would still leave 5 to 6 million unemployed people, including those on relief, and therefore no real opportunities in the cities for surplus farm people. This prospect for only partial recovery, it should be observed, is on the basis of the optimistic views of industrial prospects for 1940.

No one can predict the course of industrial activity with certainty, and even those of very definite optimistic or pessimistic, or intermediate views hold certain reservations in mind. It may therefore be helpful to examine the recent course of industrial activity with typical-recovery experiences as a basis of comparison and as a basis for applying our individual judgment as to the future. How closely has the recovery so far paralleled past experience? If it continues to parallel past experience, what may we expect in regard to employment, the national income, and the farm income?

About a year ago, after industrial recovery had set in again, we examined the 1937-38 experience in the light of previous similar sharp recessions and the recoveries that followed them. <sup>1/</sup> That comparison led us to say "Since August 1937 the course of industrial production has roughly followed the average or typical cycle (see

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<sup>1/</sup> See Industrial Unemployment and the Farmer, by L. H. Bean in the Agricultural Situation, U. S. Department of Agriculture, January 1939.

lower half of Chart I). Both the decline between August 1937 and June 1938 and the advance since then have been somewhat greater than the average. And if this recovery were to continue to follow this pattern of recoveries after similar abrupt declines, it would continue an irregular, though generally upward, course until about the first quarter of 1940. By that time it might reach a level of about 10 percent higher than that of August 1937 (corresponding to the Federal Reserve Board Index of 130 percent of the 1923-25 average compared with 117 in August 1937)."

At the time that statement was made the index of industrial production was 104 (December 1938). After that it declined to 92 by May 1938 and had recovered to 103 for August 1939. With the outbreak of war the recovery pace was quickened and the index of industrial production is now close to 125--not much different from the level suggested by what we have called the typical course of recovery following sharp recessions such as that of 1937-38.

At this point it should perhaps be observed that some students of the business situation as it existed in August 1939 argue that all of the advance we have had since then is due to war stimulus and that we would have been experiencing a recession at this time had it not been for the outbreak of war. It is argued that a sustained advance in industrial recovery depends on increases in general consumer purchasing power; that there are three major sources of such increases, namely income from exports, income created by private investments in capital goods, and disbursements by Government in excess of receipts; and that last August there was little prospect that any of these mainsprings of recovery would sustain the August volume of activity. Those who held that view then are now among those who are most skeptical about the present business rise and expect an immediate substantial reduction in activity.

The fact that this recovery has paralleled fairly closely the typical course, in spite of the impact of war tension throughout 1938 and 1939 and final outbreak of war last September, suggests that for the near future we may have witnessed most of the recovery we are likely to have. There is still another fact of some interest, and that is that during the World War, industrial production advanced about 40 percent in the 13-month period between December 1914 and January 1916. This constituted about 80 percent of the maximum wartime advance reached in May 1917. If we take the present recovery from the low point of May 1938, which means assuming that part of the rise after that date was influenced by active war in Asia and preparation for war in Europe, we have already seen an advance in industrial production from 76 in May 1938 to nearly 125 at present, or an advance of nearly 65 percent. This is approximately the rise that took place during the entire recovery between the spring of 1921 and the spring of 1923, and between the fall of 1934 and the spring of 1937. The greater advances in these instances, as in the current recovery, than that of 1915-16 is in part due to the fact that they started from relatively lower levels.

If during the next year or two industrial activity should fail to advance materially beyond the present levels, we shall have to deal with a basic question, serious consideration of which has been neglected during the recent decades of our rapid rate of industrial growth. That question is the proper balance in our total population between agriculture and industry.

Decade after decade our urban population grew faster than the rural, and the proportion of the total population living on farms declined gradually to about one-fourth by 1930. It might have been expected that sooner or later the decline would cease, would naturally taper off, but this cessation has come upon us abruptly as an event. In a sense, the question as to what is the proper balance between farming and other occupations is at the moment academic, for the prevalence of unemployment in the cities, in spite of war stimulus to industry, means that nonagricultural industries have a major task of giving full employment to the nonfarm population before they take on the task of giving jobs to surplus farm labor. It also means that the task in agriculture is fast becoming one of dealing not only with the soil and with markets and prices and income, but with people who are in great need of jobs either on the land or on rural productive job-creating programs, or on both, if we are to have among them better conditions of health and greater social responsibility and economic productivity.

The decade of the 1930's was the first decade in our history that failed to show a declining proportion of the total population living on farms and of the working population engaged in agriculture. Among the factors responsible for this situation are the shutting off of foreign immigration, a decline in the birth rate, and the scarcity of industrial opportunities for rural migration to towns and cities. It is variously estimated that had the progress of industrialization continued during the 1930's as in previous decades, we would now have perhaps 20 percent fewer people living and working on farms.

Here in striking form we have an illustration of the fact that the national economy has changed. Already it is far different from what it used to be. Adjustments of the kind that used to take place between agriculture and industry take place no longer, or at any rate not to an extent sufficient to reestablish a satisfactory balance. Obviously, if the annual farm income had to be distributed over only, for example, 26 million persons instead of 32 million, the average standard of living in the rural areas would be about 25 percent higher. If the excess farm population could enter industrial employment and migrate to urban centers, the resulting increase in the demand for farm products would mean a gain in farm income, but this route to a solution of the farm problem is not now feasible even if, from the long-time consideration of economic and social health, such a shift were desirable.

Surplus farm population is most abundant in a few areas that produce largely for export--in the cotton and wheat areas and in

certain sections of the Appalachian region. Cotton farmers are struggling to regain an export market that formerly took 8 million bales or more annually; in the fiscal year 1939, under exceptional conditions, it took only about 3.5 million bales. Cotton yields per acre have increased in recent years; cotton farmers can now produce on the average about half a bale an acre, as compared with about one-third of a bale in the 10-year period 1924-1933. They can meet the demand with less labor than was necessary formerly. On some 25 to 26 million acres, with normal yields, the cotton farmers could satisfy a domestic demand for 7 million bales and a foreign demand for 5 million bales annually. Even if the export demand increased to 8 or 9 million bales, only 30 million acres would be necessary in cotton. In the next few years, because the Government has large stocks of cotton on hand and because of increased yields per acre, it is not probable that we shall need to plant so much as 30 million acres of cotton. Ten years ago the cotton acreage was 40 to 45 million acres. The combination of high yields, more machinery in production, and reduced net demand, results in serious overpopulation in cotton agriculture.

Similar things can be said of wheat. With average yields on the recent average acreage, wheat growers can produce close to a billion bushels annually. The domestic market requires less than 700 million bushels. This leaves a potential 300 million bushels for export. For the past two seasons, however, the export market even with substantial export subsidies took only about 110 million bushels of wheat from the United States per year. In wheat, as in cotton, we can produce sufficiently for normal domestic consumption and for the current normal export demand as well, with far less manpower. Illustrative of the human problem involved, it may be said that without letting the production fall below present demand, wheat and cotton combined could get along with probably 1.5 million fewer working persons. Present prospects for domestic and foreign takings, with allowance for the possible effects of the war, do not contain the solution of this human problem.

In other agricultural areas the problem is not excess productive capacity in relation to possible market outlets but rather one of people living inadequately from every standpoint in unproductive and socially corroding surroundings. Some of these are the areas close to industrial centers where industrial depressions and shifting of industries have left people to seek security on the land. These are the areas where families barely scratch a subsistence out of depleted soil, where hillsides have been denuded and consequently eroded, and where depleted soil fertility spells also erosion in home and family.

To make the agricultural programs now in progress more effective, it is clear that we need a vigorous restoration in industrial activity--a recovery that will be more permanent than that now being stimulated by war. Much of the progress we make in establishing parity income for agriculture depends on the industrial part of our economy. The

per capita income from farm production available for family living falls short by some 2 billion dollars annually of being in line with the per capita income of the rest of the population. This estimate takes the prewar relationship as the basis. Government payments to farmers for various purposes make up only about one-third of the discrepancy. The relationship to prewar parity could be restored in several ways with results more easily and effectively attained under conditions of expanding industrial activity: (1) By enabling the average consumer to increase the proportion in his budget of his expenditure for food and clothing material, (2) by increasing the incomes and consumption of consumers whose consumption is below the average, and (3) by increasing the share of the consumer's dollar that goes to the farmers and reducing the share that goes for distribution. It is important, of course, not merely to increase the farmer's money share of the national income but to increase his actual command of city goods and services. This necessitates closing the gap between the prices of industrial products and the prices of farm products. Industrial products are now (October) about 22 percent above their prewar levels whereas farm prices are about 3 percent below.

These different ways of alleviating the condition of the farmers all require greater industrial recovery and fuller employment in the cities and an expanding volume of industrial production. They call for a fuller use of available capital in job-creating enterprises. This is the surest way, indeed the only permanent way, to increase the purchasing power of consumers. Full industrial recovery would again draw into industries some of the rural people formerly employed in cities. Hence, while increasing the income of consumers, it would tend to diminish the number of claimants upon the farm income. What full industrial recovery requires can be judged from the current relation of industrial production to employment.

This relation is illustrated in Figure 2, the main point of which is that even if we have the typical recovery shown in figure 1, unemployment will still be our real problem.

In all occupations other than agriculture about 35 million persons are now employed, compared with a total available for employment of at least 42 million. There are thus probably at least 7 million unemployed, including persons on relief and persons normally unemployed even in prosperity years. There are about 5 to 6 million more unemployed than there were in 1929, reflecting chiefly the growth in the total and in the working population. Full employment of all these people, along with the continued employment of those already in jobs, would require an increase of about 50 percent in industrial activity above the volume we were producing in the summer of 1939 and about 25 percent above the present level. Such an increase would give us a national income of 85 to 90 billion dollars, as compared with the expected national income in 1939 of only 69 billion dollars. It is not generally expected that nonfarm employment will rise above 36 million in 1940 if industrial production does not exceed the present level. And under these conditions the national income could hardly go so high as 75 billion dollars compared with 85 or 90 required for full employment.

Our interest in full industrial employment as an outlet for surplus farm labor and in a much higher national income as a source of farm purchasing power, means also an interest in the close relationship between investment in durable goods and the national income. Such investment, as it produces industrial activity and employment, promotes the general circulation of goods and services, and increases the total of money payments. Such investment comes from past and current profits and savings, and from credit based on past and prospective earnings. Much more capital is available from these sources at present than is being used. When private industry fails to use its savings, with the customary superstructure of credit, as a means of creating new industrial activity and employment, the responsibility of the Government increases. It has to make investment itself in about the same proportion that private industry fails to do so.

In one way or another the Nation's savings must be used in job-creating investments. Normally there is some Government investment along with private investment, but in times of economic crisis or depression, when private investment falls seriously below its norm, Government investment increases of necessity, either through relief payments for conservation of human resources or through public works.

In 1929, when our national income was more than 80 billion dollars, capital expenditures for durable goods such as plant and equipment, housing household goods, and automobiles, amounted to about 25 billion dollars. Such job-creating expenditures in 1932, when the national income was only about 40 billion dollars, declined to about 8 billion dollars. In 1937, on the other hand, when the national income climbed up to about 70 billion dollars, capital expenditures for durable goods were 20 billion dollars. The difference in the capital-goods expenditures of 1937 and 1929 was reflected chiefly in the expenditures for housing and for new industrial plants. If in each of the categories the country had spent about 2.5 billion dollars more in 1937, the national income in that year would probably have equaled that of 1929. Capital expenditures of an additional 2.5 billion dollars for other items would have brought about full economic recovery.

In the past, annual changes of 1 billion dollars in the expenditures for durable goods have been associated with corresponding changes of from 2 to 2 1/2 billion dollars in the national income. This correlation does not distinguish between cause and effect. It would be just as correct to say that in the past annual changes of from 2 to 2 1/2 billion dollars in the national income have been accompanied by annual changes of a billion dollars in capital expenditures for durable goods. The influence is undoubtedly reciprocal. Increased income gives rise to increased employment and increased consumer expenditures. The controllable factor, however, is the expenditure, since the means to make it now exist and can be used if investors so desire. Appropriate stimulating measures should be taken either by private investors or by Government agencies, or by both.

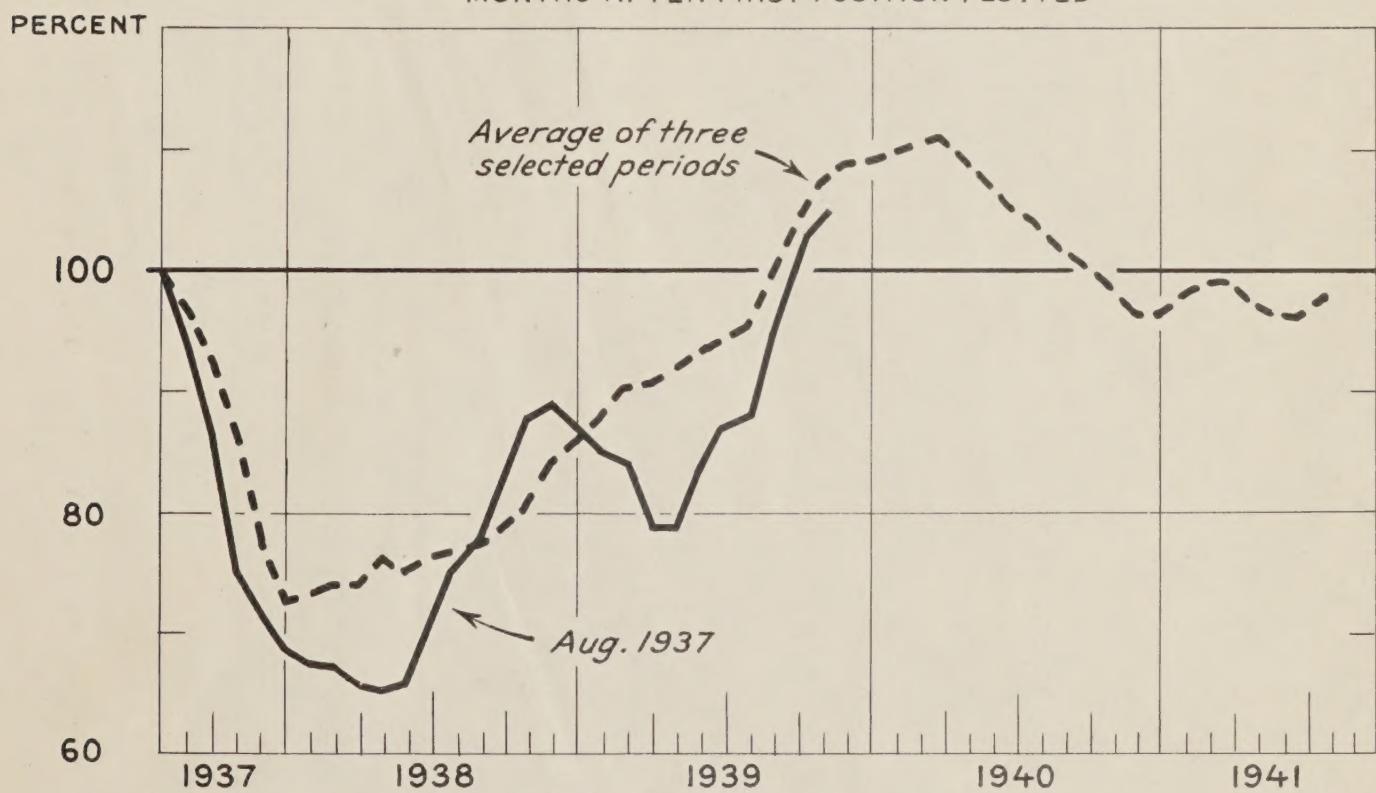
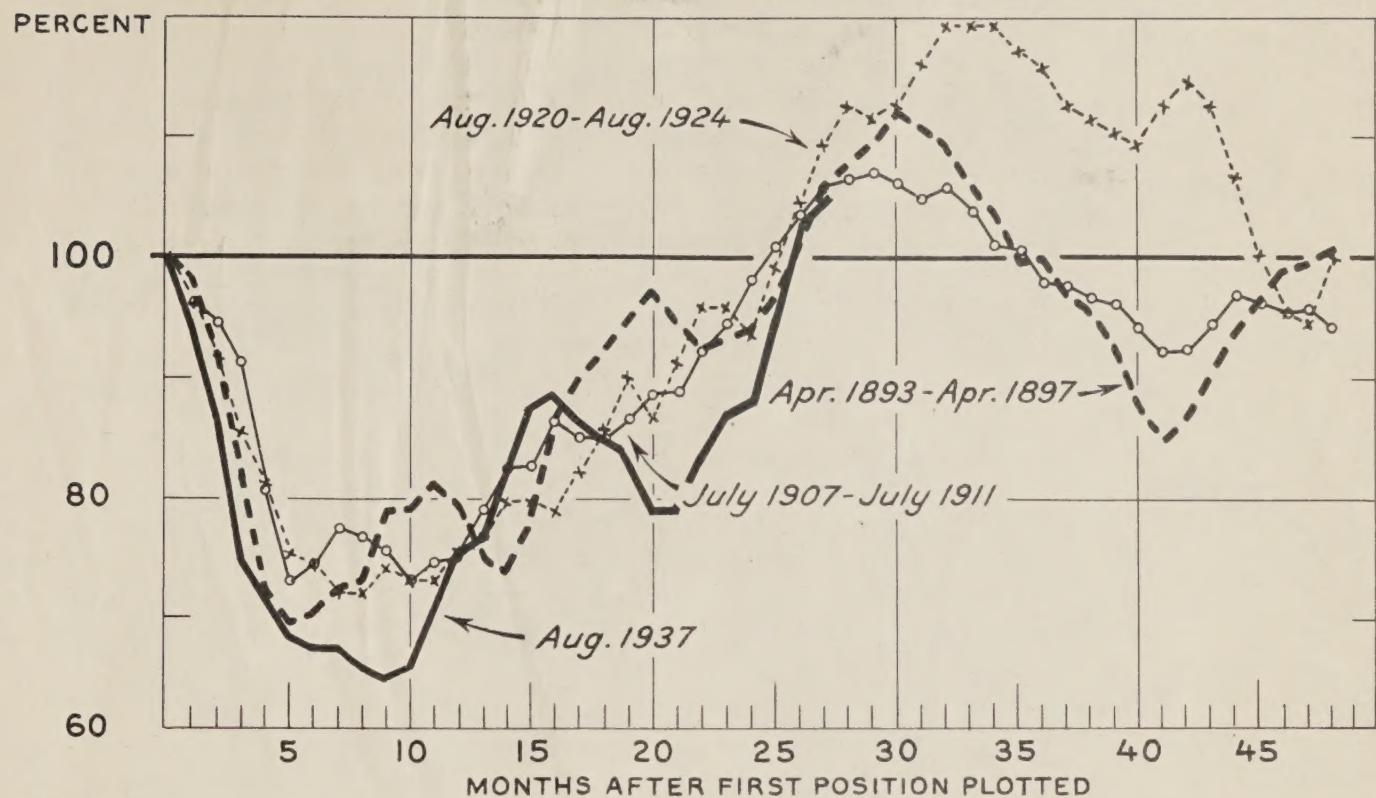
Shortages in capital expenditures stand out most clearly in housing and in plant expansion. It is in these lines, therefore, that special action is desirable. Consumers fail to purchase durable goods such as housing because their earnings are inadequate or because prices are too high. The obvious need here is to sustain and increase consumer incomes and to reduce housing costs by various means. In the last session of Congress, proposals to increase the flow of capital by means that would not increase the federal debt were considered and specific suggestions for the use of more credit in housing, in road construction, and in rural electrification were debated. The object in view is to fill the gap represented by unemployment. As already noted, this calls for about 50 percent more industrial activity. Stated in other terms, it calls for an increase of about 20 billion dollars in the national income and about 2 billion dollars in the income from farm production.

Perhaps we can divide the problem into three connected parts without drawing any exact lines of demarcation. One part concerns the problem of urban unemployment, which can be relieved only in part by relief expenditures and relief work. It is necessary ultimately to have job-creating expenditures either by private capital or by public agencies or by both of these sources together. The second part of the difficulty affects what we might term the permanent farm population--in other words, the 80 percent of the existing farm population that can produce what the market requires of foods and fibers. Measures for increasing the income of this group include crop adjustment and price, and income payments under various federal laws. The third part of the general problem is the surplus farm population, with which group we should perhaps associate a hybrid group that is neither permanently industrial nor permanently agricultural. For these people likewise we need job-creating programs.

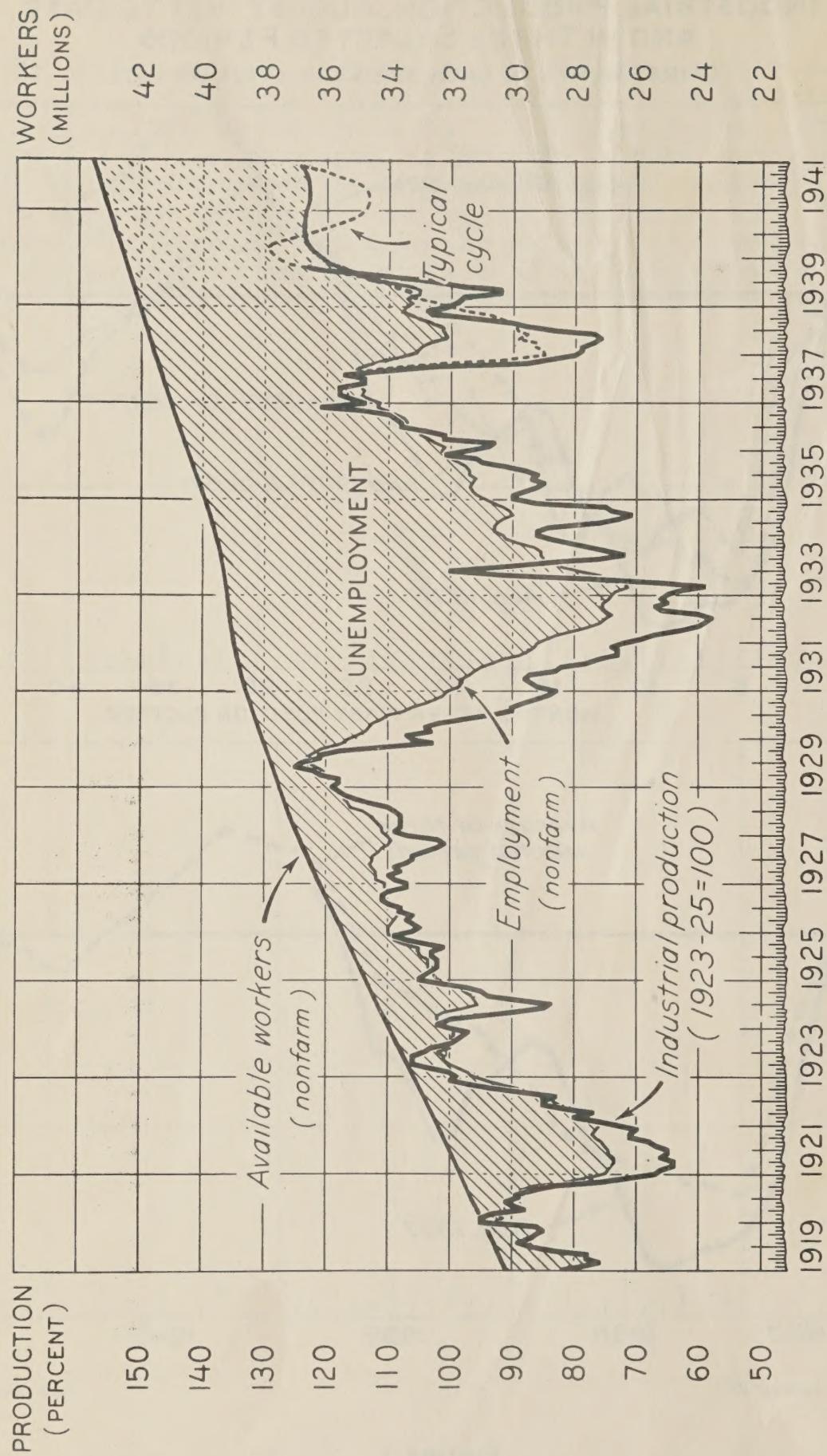
Economic planning for this group is as urgently necessary as similar planning for commercial farming and for industrial expansion and full employment. If we are seriously interested in wiping out the great disparities that now exist between the living standards in the submerged sections of agriculture and in the more successful commercial areas, we shall need to make use of the economic and social facilities of private and governmental agencies. It will be necessary to develop rural programs that mean for the substandard farm population better land for subsistence farming, more opportunities for supplementary employment, and better living conditions. Credit, corporate organization, and cooperation, have been important factors in raising our urban standard of living. With these same devices we have an opportunity to make out of our backward agricultural areas the equivalent of a new frontier and to develop essentially rural programs of economic and social value that rural people themselves can help to direct and execute. This would mean much-needed new outlets for capital that is now hesitant to enter already established industries. It could also mean a greater degree of decentralization of industries and their penetration into rural areas would create sources of supplementary income for non-commercial farmers.

Our present guess is that there is little prospect in the long-time outlook for either domestic business or foreign demand for any real solution of the problems of substandard farmers. The rehabilitation of these farm families and their economic growth and security, and the welfare of the surplus agricultural population should be among our chief objectives for the immediate future. On this agricultural front we must apply our efforts more vigorously and use the new economic and social tools created during the past 7 years to help win the victory of a more abundant standard of living.

INDUSTRIAL PRODUCTION, AUGUST 1937 TO DATE  
AND IN THREE SELECTED PERIODS  
(FIRST MONTH IN EACH SERIES PLOTTED AS 100)



INDUSTRIAL PRODUCTION AND  
UNEMPLOYMENT, UNITED STATES, 1919-39  
(ADJUSTED FOR SEASONAL VARIATION)



U. S. DEPARTMENT OF AGRICULTURE

NEG. 34783 A.A.A.

FIGURE 2